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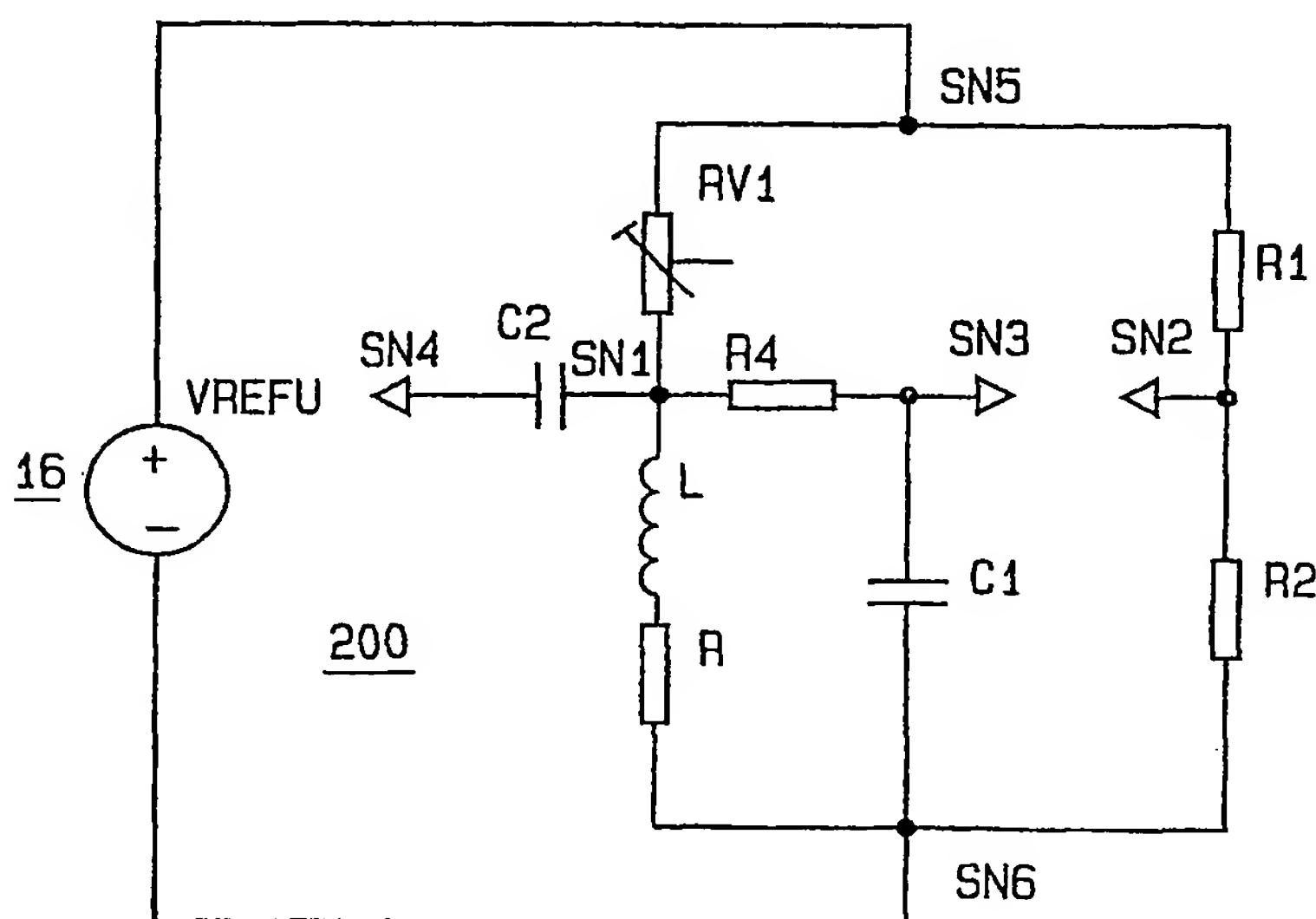
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**(54) Title:** ROTATION SENSOR WITH TEMPERATURE MEASURING FEATURE



**(57) Abstract:** A temperature sensing system (100) for use with a variable reluctance sensor such as found in vehicle wheel bearing applications, which utilizes existing sensors (12) such as the antilock braking system or traction control system sensors as a direct current resistive temperature gauge. The temperature sensing system (100) includes electrical components (R4, C1) configured to separate the DC voltage ( $V_{DC}(t)$ ) representative of sensor temperature from the original magnetically induced AC voltage output signal ( $V_{SN1}(t)$ ) representative of the rotation such as vehicle wheel speed, thereby permitting the temperature sensing system (100) to be retrofitted and installed in vehicles or other components without significant alteration to an existing wiring harness or electrical components.